

## REMARKS

Applicant and his attorney wish to express their gratitude to Examiner Wesley Markham for the courtesy and assistance he extended during the recent personal interview. As discussed during the interview, claims 20 and 75 have been amended to more particularly define the annealing step that occurs during the process. For instance, claim 20 has been amended to state that the solid layer being formed is annealed multiple times during formation of the layer. The multiple annealing steps occurring after the reaction chamber is purged by an inert gas and prior to the next pulse of a precursor fluid. Claim 20 further requires that the solid layer be annealed by exposing the solid layer to thermal light energy that heats the solid layer to a temperature sufficient to anneal the layer.

In amending claims 20 and 75, Applicant has canceled all remaining independent claims, namely claims 50, 51 and 52.

Although no agreement was expressly reached during the personal interview, Examiner Markham indicated that claims 20 and 75 as now amended appeared to patentably define over the prior art of record.

For instance, as discussed during the interview, Nishizawa, Utsumi and DiMeo all failed to disclose or suggest annealing a solid layer multiple times during formation of the layer. Nishizawa and Utsumi do disclose the use of ultraviolet light. As described in column 3 in Utsumi, however, ultraviolet light electrically excites molecules without any significant temperature increase. In fact, Utsumi teaches using ultraviolet light without a temperature rise. As such, both references fail to disclose or suggest a process in which a solid layer is annealed multiple times using thermal light energy that heats the solid layer to a temperature sufficient to anneal the layer.

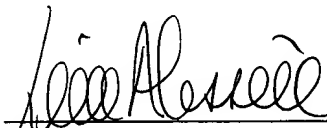
In the Office Action, the claims were also rejected under 35 U.S.C. § 112. In particular, the Examiner requested clarification as to what was meant by the phrase “thermal light energy”. In response, the Examiner’s attention is directed to page 8 of the present application which discusses the use of light energy sources or lamps to heat a substrate. The application states, for instance, that the lamps create a rapid thermal processing system that emit thermal energy. When a wafer is heated using thermal

energy, the film formed on the substrate is annealed in order to repair or correct defects that may have formed (see pages 4, 8, 14 and 15 of the present specification). In view of the above, it is believed that the phrase "thermal light energy" is sufficiently described and defined in the present application.

In summary, it is believed that the present application as currently amended patentably defines over the prior art of record and is in complete condition for allowance. Should any issues remain after consideration of this Amendment, however, then Examiner Markham is invited and encouraged to contact the undersigned at his convenience.

Respectfully submitted,

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Date

  
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